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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/586,594	06/02/2000	Youichi Sawachi	0905-0237P-SP	6137

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EXAMINER

WU, DOROTHY

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 11/07/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/586,594

Applicant(s)

SAWACHI, YOUICHI

Examiner

Dorothy Wu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claims 2-4 and 20 are objected to because of the following informalities.

Regarding claims 2-4, the claims hyphenates “settings-data reading unit,” whereas the term is not hyphenated in parent claim 1.

Regarding claim 10, the claims recites the limitation “that has been recorded the settings recording medium” instead of “that has been recorded on the settings recording medium.”

Appropriate correction is required.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: regarding claims 11 and 13, the specification does not provide antecedent basis for displaying either the plurality of processing methods or shooting conditions stored in the settings recording medium, or the selection of one processing method or shooting condition from the plurality of processing methods and shooting conditions.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claims 4, 5, 9, 10, 12, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the claim recites the limitation “a second determination unit.” However, the claim 4 and parent claim 1 do not recite a first determination unit. Imaging controller – antecedent basis.

Regarding claim 5, the claim recites the limitation “processing-method settings data” and “image-processing-method settings recording medium.” There is insufficient antecedent basis in the claims for these limitations.

Regarding claim 9, the claim recites the limitation “a third image-signal recording controller.” However, the claim 9 and parent claim 1 do not recite a second image-signal recording controller.

Regarding claims 10, 12, and 14, the claims recite the limitations “an image signal reading unit for reading an image signal that has been recorded on the settings recording medium,” “an image signal reading unit for reading an image signal... from said settings recording medium,” and “an image signal reading unit for reading, from the settings recording medium, an image signal captured in accordance with a shooting condition,” respectively. There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7-8, 10, 12, and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Aihara et al, U.S. Patent 5,859,951, in view of Iizuka et al, U.S. Patent 5,845,044.

Regarding claim 1, Aihara teaches a digital camera (col. 6, line 56) in which a settings recording medium (setup card) and an image-signal recording medium (video tape 17) are capable of being removably loaded (col. 7, lines 19-21, 31-34), wherein settings data for setting the state for various component parts of the imaging lens 3, CCD image sensor 4, and imaging signal processing circuit 7, which reads on settings data for at least one of shooting conditions and image processing method for processing an image signal obtained by photography, are recorded on the settings recording medium (col. 10, lines 36-46) and the image signal obtained by photography is recorded on the image-signal recording medium (col. 7, lines 31-34). Aihara teaches that the digital camera comprises: an image sensing device (CCD image sensor 4) for imaging a subject and outputting an image signal representing the image of the subject (col. 6, lines 60-64); a settings data reading unit (setup card recording/reproducing unit 11) for reading the settings data that has been recorded on the settings recording medium (col. 10, lines 39-42); an imaging control unit (system controller 9) for controlling said image sensing device so as to image the subject in accordance with shooting conditions that are based upon the settings data when the settings data that has been read by said settings data reading unit pertains to these shooting conditions (col. 10, lines 39-46); an image signal processing unit (imaging signal processing circuit 7) for applying image processing to an image signal, which is output from said image sensing device, in accordance with a processing method that is based upon the settings

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data when the settings data that has been read by said settings data reading unit pertains to this image processing method (col. 10, lines 39-46), and outputting the image signal that has been subjected to this image processing (Fig. 1); and a first image-signal recording controller (rotary head 16) for recording the image signal, which has been output from said image signal processing unit, on the image-signal recording medium (col. 7, lines 30-34; Fig. 1).

Aihara does not teach a still camera. Iizuka teaches that when a recording medium storing camera settings is loaded into a camera, the camera is set and adjusted according to the settings on the recording medium (4, 35-43). Iizuka also teaches that the same technique may be applied to an electronic still camera (col. 12, 60-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Aihara into the electronic still camera of Iizuka to make a digital still camera with a settings recording medium that stores image processing methods and shooting conditions such that the image processing methods and shooting conditions are set in the camera when the settings recording medium is loaded. One of ordinary skill would have been motivated to make such a modification to store predetermined camera settings that produce high-quality images.

Regarding claim 2, Aihara teaches a memory 10 used for restoring imaging parameters such as the zooming ratio of the imaging lens 3, an electronic shutter speed of the CCD image sensor 4, or the gamma correction degree of the imaging signal processing circuit 7 (col. 7, lines 11-19). Aihara teaches that the setup card is removable (col. 7, lines 21-22). It would have been obvious to one of ordinary skill in the art to use the predetermined processing method stored in memory 10 to process the image signal when the setup card is not loaded in the camera, which reads on the settings data being incapable of being read by said settings data reading unit.

Regarding claim 3, Aihara teaches a memory 10 used for restoring imaging parameters such as the gamma correction degree of the imaging signal processing circuit 7, which reads on the processing-method data storage unit for storing data representing a processing method that has been previously executed by said image signal processing unit (col. 7, lines 11-19). Aihara teaches that the setup card is removable (col. 7, lines 21-22). It would have been obvious to one of ordinary skill in the art that when the setup card is not loaded in the camera, which reads on the settings data being incapable of being read by said settings data reading unit, the image signal would be processed according to a processing method based upon data stored in the processing-method-data storage unit.

Regarding claim 4, Aihara teaches a memory 10 used for restoring imaging parameters such as the zooming ratio of the imaging lens 3, which reads on the shooting-condition storage unit for storing shooting conditions that were put into practice by said image control unit (col. 7, lines 11-19). Aihara teaches that the setup card is removable (col. 7, lines 21-22). It would have been obvious to one of ordinary skill in the art that when the setup card is not loaded in the camera, which reads on the determination that the settings data cannot be read, the image sensing device would be controlled in accordance with shooting conditions that have been stored in the shooting-condition storage unit.

Regarding claim 5, Aihara teaches that when the setup card is loaded, the system controller 9 reads out imaging parameters in the setup card and controls the setting state of the imaging signal processing circuit 7 accordingly, which reads on the settings data reading unit reading processing-method settings data that has been recorded on the image-processing-method

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settings recording medium in response to the settings recording medium being loaded (col. 10, lines 36-46). The loading sensing unit is inherently taught.

Regarding claim 7, Aihara teaches a first socket for loading the settings recording medium (setup card) and a second socket for loading the image-signal recording medium (video tape 17) (Fig. 1).

Regarding claim 8, Aihara teaches that the video tape 17 has both imaging data and imaging parameters recorded upon it (col. 7, lines 31-34). It would have been obvious to one of ordinary skill that imaging data, in addition to imaging parameters, could be recorded on the settings recording medium.

Regarding claim 10, Aihara teaches that the video tape 17 has both imaging data and imaging parameters recorded upon it (col. 7, lines 31-34). It would have been obvious to one of ordinary skill that imaging data, in addition to imaging parameters, could be recorded on the settings recording medium. Aihara teaches that an image represented by the image signal is displayed on a display unit (electronic view finder 19) (col. 8, lines 34-41). The display controller is inherently taught.

Regarding claim 12, Aihara teaches a recording/reproducing system 2 for reproducing the imaging data from the recording track, which reads on an image signal reading unit (col. 7, lines 31-36). As Aihara teaches that the video tape 17 records data from imaging system 1, the signal read from video tape 17 has been processed in accordance with a processing method.

Regarding claim 15, Aihara teaches a method of controlling a digital camera in which a settings recording medium (setup card) and an image signal recording medium (video tape 17) are capable of being removably loaded (col. 7, lines 19-21, 31-34), wherein settings data for

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setting the state for various component parts of the imaging lens 3, CCD image sensor 4, and imaging signal processing circuit 7, which reads on settings data for at least one of shooting conditions and image processing method for processing an image signal obtained by photography, are recorded on the settings recording medium (col. 10, lines 36-46) and the image signal obtained by photography is recorded on the image-signal recording medium (col. 7, lines 31-34). Aihara teaches the steps of imaging a subject and outputting an image signal representing the image of the subject (col. 6, lines 60-64); reading the settings data that has been recorded on the settings recording medium (col. 10, lines 39-42); when the settings data that has been read pertains to shooting conditions, imaging the subject in accordance with shooting conditions that are based upon this setting data (col. 6, lines 60-64); when the settings data that has been read pertains to an image processing method, applying image processing to an image signal, which has been obtained by photography, in accordance with a processing method that is based upon this settings data (col. 6, lines 60-64); and recording the image signal, which has been subjected to this image processing, on the image-signal recording medium (col. 7, lines 30-34; Fig. 1).

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aihara et al, U.S. Patent 5,859,951, in view of Iizuka et al, U.S. Patent 5,845,044, in view of Vlahos et al, U.S. Patent 5,907,315.

Regarding claim 6, Aihara in view of Iizuka teach the apparatus of claim 1. Aihara in view of Iizuka do not teach that the settings data that has been recorded on the settings recording medium is reread in response to entry of a reset command. Vlahos teaches that when a reset command is inputted, settings revert to default settings. Therefore, it would have been obvious to

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one of ordinary skill in the art at the time the invention was made to incorporate the practice of resetting camera settings taught by Vlahos into the apparatus of Aihara in view of Iizuka to make an apparatus that rereads the settings on a settings recording medium in response to a reset command. One of ordinary skill would have been motivated to make such a modification to restore the camera to an original, pre-established setting.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aihara et al, U.S. Patent 5,859,951, in view of Iizuka et al, U.S. Patent 5,845,044, in view of Hamamura, U.S. Pub. No. 2003/0133021.

Regarding claim 9, Aihara in view of Iizuka teach the apparatus of claim 1. See above. Aihara teaches that images are recorded on the settings recording medium. See above. Aihara in view of Iizuka do not teach a reduced-image generating unit for generating a reduced image of an image represented by the image signal output from said image signal processing unit. Hamamura teaches that images are compressed [0028]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the practice of compressing images taught by Hamamura into the apparatus of Aihara in view of Iizuka to make an apparatus that compressed images before storing them. One of ordinary skill would have been motivated to make such a modification to reduced the amount of storage space used in memory.

7. Claims 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Aihara et al, U.S. Patent 5,859,951, in view of Iizuka et al, U.S. Patent 5,845,044, in view of Ohkawara et al, U.S. Patent 6,630,950.

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Regarding claims 11 and 13, Aihara in view of Iizuka teach the apparatus of claim 1. See above. Aihara in view of Iizuka do not teach that settings data representing image processing methods or shooting conditions of a plurality of types are recorded on the settings recording medium, nor do Aihara in view of Iizuka teach that the camera reads out the plurality of types of image processing methods or shooting conditions, displays them, or allows a user to select an image processing method or shooting condition to be performed. Ohkawara teaches the display of a plurality of imaging sensing condition items and allows the photographer to select the item for use (col. 45, lines 19-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of claim 1 with the practice of selecting from a variety of image sensing conditions taught by Ohkawara to make an apparatus that stores a plurality of imaging processing methods or shooting conditions on the settings recording medium, displays the options, and allows a user to select from among the pre-stored imaging processing methods or shooting conditions. One of ordinary skill would have been motivated to make such a modification to enable the user to restore separate predetermined shooting and image processing states.

Regarding claim 14, Aihara teaches that the video tape 17 has both imaging data and imaging parameters recorded upon it (col. 7, lines 31-34). It would have been obvious to one of ordinary skill that imaging data, in addition to imaging parameters, could be recorded on the settings recording medium. Aihara teaches that an image represented by the image signal is displayed on a display unit (electronic view finder 19) (col. 8, lines 34-41). The display controller is inherently taught.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dorothy Wu whose telephone number is 703-305-8412. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-7644.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

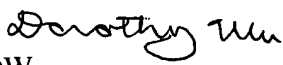
Washington, D.C. 20231


Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)306-0377.


DW
October 31, 2003


ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600